M680™ Mortar Pump

Sprayer for Mortar, Cementitious and Heavily Filled Materials

PROVEN QUALITY. LEADING TECHNOLOGY.

A better way to spray heavy, gritty materials

The Graco M680™ Mortar Pump handles abrasive materials such as epoxy mortars, non-skid coatings or cementitious materials, and tackles difficult polymers with fillers such as glass flake, silica or sand.

Profitable shortcut to hand troweling

Hand troweling cementitious materials is time-consuming. With a Graco M680 Mortar Pump, you can save time, speed up the process and increase your profits by spraying and finish-troweling the material instead of using the traditional hawk and trowel method.

Less material waste and improved quality

With Graco's M680 Mortar Pump, your crews can get more thickness control by spraying instead of hand applying. The surface gets a more consistent layer of material. In addition, there's much less chance of material curing before it gets applied.

Fast, easy cleaning

The sprayer's high velocity flush is often all that is needed to clean the pump and prevent buildup of heavy material in the spray lines. If needed, the pump is designed to be quickly taken apart for hand cleaning.

Built tough for long-lasting durability

Engineered to withstand the grittiest materials, the Graco M680 pumps heavy materials at low pressures (typically 200 to 500 psi/13.7 to 34.5 bar) and uses an applicator to atomize the material and transfer it to the substrate. Its low-pressure design reduces wear and tear on the pump lower.

Ideal for coating contractors

Your crew will discover that the Graco M680 Mortar Pump is easy to use, with similar functionality to an air-operated sprayer. They'll be up and running in no time.

- Explosion proof for hazardous spray areas
- Convenient – one air source runs the pump and atomizing air

Industries

Water and wastewater
Mining
Oil and gas
Marine and offshore
Building and infrastructure
General construction

Materials and Applications*

Epoxy-based mortars
Cementitious coatings
Re-surfacing materials
Coatings with small aggregate
Non-skid coatings
Waterproofing
Epoxy claddings
Cementitious fireproofing
...and more

** Some materials require special handling and testing; contact Graco or your distributor for assistance*

Air Motor and Controls

- 3400 NXT™ Motor
- Filtered air for pump and applicator
- Chicago-style inlet air connection

Hopper

- Heavy-duty stainless steel
- Straight sides for easy cleaning
- Quick-release connections

Tool box

- For convenient storage of accessories and spare parts

Pump Lower – 680cc

- Designed for heavy materials, stainless steel construction
- Tri-clamp on cylinder – easy to disassemble
- Pack-less pressure relief valve
- High-velocity flush for effective cleaning

Fluid and Air Lines

- Chemically resistant fluid hoses
- Solvent resistant sleeve
- Cam and groove connections

Hose Cam and Groove Connection

- For quick and easy assembly

Applicator

- Your choice of Flex Hose, Pole or HTX 680 Applicator
  - Flex – for heavy materials
  - Pole – for heavy materials in hard to reach areas
  - HTX 680 – for lighter materials
- On/off motor pilot controls
- Atomization air adjustments

Features and Benefits

ITEM	FEATURE	BENEFIT
Hopper	10 gal (38 L) capacity	Holds two mixed kits
	Durable with straight sides	Easy to scrape sides clean
	Cam and groove intake connections	Easy to remove and clean inlet connections
Pump Lower	Specialized 680 cc pump lower	Handles cementitious and repair mortars
	High out, 680 cc lower	Maximized production for sprayable materials
	Stainless steel construction	Won't rust or corrode with water-based materials
	Packless relief valve	Safety relief – won't pack out after first use
	Tri-clamps on pump cylinder	Easy to disassemble – tool provided
	One-piece throat and piston packing	Few wear parts
	Cam and groove outlet connection	Easy to remove hoses for pump tear down
Fluid Hoses	Compatible with epoxies, urethanes, solvents, water	One hose fits all – no changing hoses between applications
	Cam and groove connections	Easy to change hoses – saves time
Spraying	Multiple applicator technologies	Handles a variety of heavy and lightweight materials and coatings
		Allows for various spray patterns
Flushing	High velocity circulating flush, up to 15 gpm (57 lpm)	Effectively cleans lower and hoses after each spray period
Approvals	CE-approved CE Ex	Safe to use in environments with explosive atmospheres

Pole Applicator

- For hard to reach areas
- Best for heavily filled materials that easily pack out
- Includes Round Nozzle; provides a rough finish texture
- Simple design, easy to clean

Flex Hose Applicator

- Best for heavily filled materials that easily pack out
- Includes Round Nozzle; provides a rough finish texture
- Simple design, easy to clean

HTX 680 Applicator

- Good for lighter materials that don't typically pack out
- Includes Round Pattern Nozzles; provides a medium round pattern texture finish
- Air mixed into fluid through multiple venturi ports provides a consistent pattern
- Gives a more controlled pattern for lightweight materials or high solids coatings
- Includes flat pattern discs – fans spray pattern for wider coverage area per pass

Large Capacity Hopper

- Ideal for materials that require more than 10 gal/38 liter capacity, such as fireproofing
- Boost productivity by minimizing refills
- 25 gal (95 L) hopper kit
- Easily connects to M680
- Easy to connect and maneuver

ROI Calculator

Return on Investment

Save time and money by spraying material with the Graco M680 Mortar Pump and troweling to finish.

Graco M680 Mortar Pump R.O.I.

	With Sprayer	Example		Without Sprayer	Example
1.	Pump operator(s) / Mixer(s)	1	1.	People mixing kits	1
2.	People spraying	1	2.	People spraying	0
3.	# of people required to finish trowel only	1	3.	# of people required to hawk & trowel manually	3
4.	Labor rate/hour (including benefits)	$27.00	4.	Labor rate/hour (including benefits)	$27.00
5.	Hours to complete resurfacing	16	5.	Hours to complete resurfacing	32
6.	Crew Total	3	6.	Crew Total	4
7.	Man hours	48	7.	Man hours	128
8.	Labor cost	$1,296.00	8.	Labor cost	$3,456.00

LABOR SAVINGS % 63%

How much will you save?

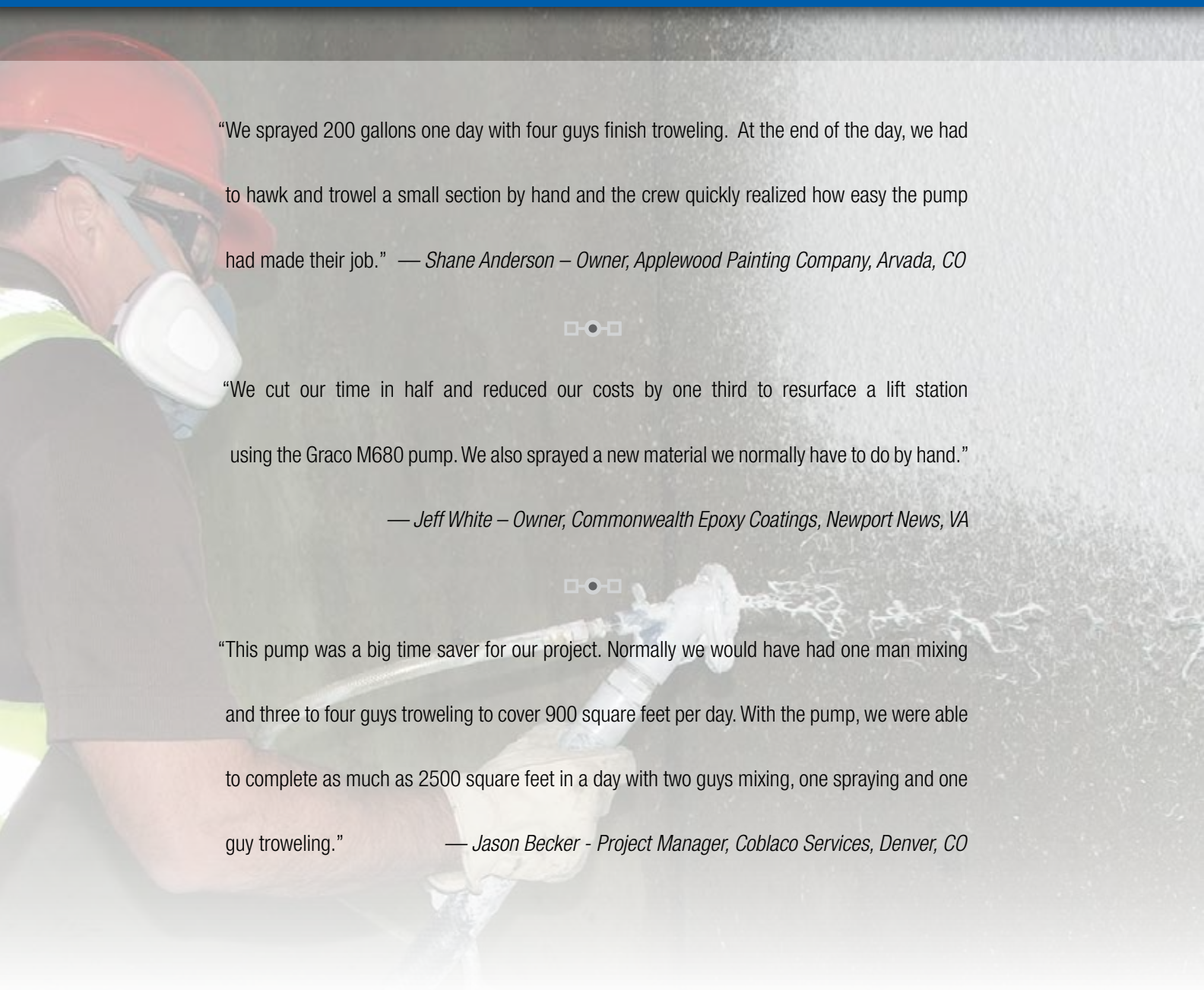
	With Sprayer	Actual		Without Sprayer	Actual
1.	Pump operator(s) / Mixer(s)	_____	1.	People mixing kits	_____
2.	People spraying	_____	2.	People spraying	_____
3.	# of people required to finish trowel only	_____	3.	# of people required to hawk & trowel manually	_____
4.	Labor rate/hour (including benefits)	$ _____	4.	Labor rate/hour (including benefits)	$ _____
5.	Hours to complete resurfacing	_____	5.	Hours to complete resurfacing*	_____
6.	Crew Total [add lines 1, 2, 3]	_____	6.	Crew Total [add lines 1, 2, 3]	_____
7.	Man hours [multiply lines 4 + 6]	_____	7.	Man hours [multiply lines 4 + 6]	_____
8.	Labor cost [multiply lines 7 + 4]	$ _____	8.	Labor cost [multiply lines 7 + 4]	$ _____

LABOR SAVINGS % _____

LABOR SAVINGS % = change in line 8 labor cost / labor cost without sprayer

** Based on field testing, resurfacing takes less than half the time with a Graco M680 Mortar Sprayer*

What are people saying about the Graco M680 Mortar Pump?



"We sprayed 200 gallons one day with four guys finish troweling. At the end of the day, we had to hawk and trowel a small section by hand and the crew quickly realized how easy the pump had made their job." — *Shane Anderson – Owner, Applewood Painting Company, Arvada, CO*

"We cut our time in half and reduced our costs by one third to resurface a lift station using the Graco M680 pump. We also sprayed a new material we normally have to do by hand."

— *Jeff White – Owner, Commonwealth Epoxy Coatings, Newport News, VA*

"This pump was a big time saver for our project. Normally we would have had one man mixing and three to four guys troweling to cover 900 square feet per day. With the pump, we were able to complete as much as 2500 square feet in a day with two guys mixing, one spraying and one guy troweling." — *Jason Becker - Project Manager, Coblaco Services, Denver, CO*

Technical Specifications

Pressure Ratio	10:1 fluid to air
Maximum air operating pressure	100 psi (0.7 MPa, 7 bar)
Air Inlet Size	3/4 in. npt(f) (Chicago Claw Fitting)
Fluid Inlet Size	2 in cam groove male
Fluid Outlet Size	1 in npt(f)
Dry Weight	250 lb (113 kg) with 35ft hose and applicator
Chemical resistance	Compatible with solvent or water based materials
Inlet air filtration	40 micron, moisture separation with auto drain
Wetted parts	SST, aluminum, carbide seats, plated steel fittings, PTFE, UHMWPE, solvent-resistant elastomer
Manual	332612

Sprayability may be affected by aggregate size or distribution, hose size and other factors.
Check with material suppliers or contact your Graco distributor for a demonstration.

Ordering Information

Packages

All packages include: pump; motor; controls on cart; gaskets for cam and groove connectors; pilot tube repair fitting; pump rachet tool and soft seal pump kit. Package 262927 includes a complete pump repair kit instead of soft seal kit.

262927	M680 Cart Unit, 60 ft (18 m) hose kit, 24U209 HTX 680 and 24T947 Flex Hose applicator, SST hopper, spare hard rubber retaining cap, extra #3, 4, 8, 9, size nozzles for Flex Hose/Pole applicator
24T834	M680 Cart Unit, 35 ft (10.7 m) hose kit, 24T947 Flex Hose applicator, SST hopper
24T835	M680 Cart Unit, 35 ft (10.7 m) hose kit, 24T947 Flex Hose applicator, no hopper
262909	M680 Cart Unit, 35 ft (10.7 m) hose kit, 24U209 HTX 680 applicator, SST hopper
262926	M680 Cart Unit, 35 ft (10.7 m) hose kit, 24U209 HTX680 applicator, no hopper
24T836	M680 Cart Unit with SST hopper, no hoses, no applicator
24T837	M680 Cart Unit, bare, (cart, pump, motor and air controls only)

Applicators, Flex Hose and Pole

24T947	Flex Hose applicator kit
24T946	Pole applicator kit
16A405	Retaining cap, medium rubber (supplied with gun)
16A421	Retaining cap, hard rubber
16A443	Round Nozzle #3, 3/16 in
16A444	Round Nozzle #4, 1/4 in
16A445	Round Nozzle #5, 5/16 in (supplied with applicator)
16A446	Round Nozzle #6, 3/8 in (supplied with applicator)
16A447	Round Nozzle #7, 7/16 in (supplied with applicator)
16A448	Round Nozzle #8, 1/2 in
16A449	Round Nozzle #9, 9/16 in

HTX 680 Applicators

24U209	HTX 680 Applicator Kit. Includes 4 mm, 6 mm, 8 mm, 10 mm round nozzles, and A, B, C, D pattern discs.
248524	HTX Round Pattern Nozzle, 4 mm (supplied with HTX 680 Gun)
248525	HTX Round Pattern Nozzle, 6 mm nozzle (supplied with HTX 680 Gun)
248526	HTX Round Pattern Nozzle, 8 mm nozzle (supplied with HTX 680 Gun)
248527	HTX Round Pattern Nozzle, 10 mm nozzle (supplied with HTX 680 Gun)
287227	Flat Pattern Nozzle Kit for HTX 680 gun. Includes A, B, C, D (1/8, 1/4, 5/16, 3/8) pattern discs.
24U337	HTX 680 Fine Finish RAC Extension Kit. Includes RAC 671 tip and guard, extension tube, and 18 and 30 mesh filters.
24U217	HTX Applicator. Spare spray head assembly

Fluid and Air Lines

24R254	Spray Line Extension bundle (fluid and air), 25 ft (7.6 m)
24U210	Spray Line kit (fluid and air) with fluid shut-off valve, 35 ft (10.7 m)
16W511	Hose, 1 in x 25 ft (7.6 m), 1000 psi (69 bar) bare hose, solvent compatible, 1 in (mbe)
16W512	Hose, 3/4 in x 10 ft (3 m), 1000 psi (69 bar) bare hose, solvent compatible, 1 in (mbe)
24U185	Fluid line sleeve, replacement, 50 ft (15.2 m), solvent resistant. Keeps fluid lines clean. Polyethylene 3 in tubing, 6 mil
16W601	Hose Clean Pack Out Kit. Adapter to reverse fluid hoses.
24U331	Standard air hose replacement bundle, 3/8 in x 38 ft (11.6 m) with pilot line and solvent resistant sleeve
24T852	Air hose extension replacement bundle, 3/8 in x 26 ft (7.9 m) with pilot line and solvent resistant sleeve
24U184	Air line sleeve, replacement, 50 ft (15.2 m), solvent resistant. Keeps air lines clean. Polyethylene 2 in tubing, 6 mil
262910	Pilot line, 75 ft (11.6 m), (cut to length.)
127312	Pilot line splice connector (fbe). For repairing damaged pilot line.

Pump Accessories

16W508	M680 Pump lower rebuild kit. Soft parts plus hardened stainless steel balls.
24U173	M680 Pump soft seal kit
16W510	Carbide inlet seat with O-ring
16W509	Carbide piston seat with O-ring
16W513	Zero-cavity relief valve at pump outlet. Complete valve.
16X005	Xtreme® connection kit. For light to medium duty airless spraying. Includes tie rods and couplers to adapt an Xtreme lower to the system. Requires Xtreme lower and high-pressure accessories.

Hopper Kits

24W889	25 gal (95L) hopper kit with 2 in (5 cm) cam/groove fitting
24T853	Standard hopper kit. Includes 10 gal (38 L) SST hopper with 2 in npt cam/groove fittings and mounting bracket
16U537	Hopper lid, SST (Not supplied with standard hopper kit)

ABOUT GRACO

PROVEN QUALITY. LEADING TECHNOLOGY.

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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MADE IN USA

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